

**Orthophosphate and Total Phosphate
HACH 10209 (Ortho.) and 10210 (Total Phos.)****Page 1 of 2**
High Range- DOC316.53.01125, Low Range- DOC316.53.01124

Facility Name: _____ VELAP ID _____

Assessor Name: _____ Analyst Name: _____ Inspection Date _____

Relevant Aspect of Standards**Method
Reference****Y****N****N/A****Comments***Records Examined:* SOP Number/ Revision/ Date _____ Analyst: _____Sample ID: _____ Date of Sample Preparation: _____ Date of
Analysis: _____Are samples collected in plastic or glass bottles that have been acid cleaned with
1:1 HCl and rinsed with Del?

Pg. 5

Is phosphate-free detergent used on glassware?

Pg. 5

Is the appropriate reagent set used? TNTplus 843 is for low-range (0.15-4.50 mg/L
 PO_4^{3-} or 0.05-1.50 mg/L $\text{PO}_4\text{-P}$) and TNT plus 844 is for high-range (1.5-15.0 mg/L
 PO_4^{3-} or 0.5-5.0 mg/L $\text{PO}_4\text{-P}$.)

Pg. 1

Total Phosphate:Are samples analyzed immediately after collection or preserved for up to 28 days
by adjusting the pH to 2 or less with H_2SO_4 and storing at 4°C?

Pg. 5

Are acid-preserved samples warmed to 15-25°C and neutralized with 5N NaOH
before analysis?

Pg. 5

Is the reactor heated to 100°C prior to digestion?

Pg. 2

Is 0.5 mL of sample pipetted into the vial for high-range, or 2 mL of sample for low-
range?

Pg. 2

After adding sample to the vial, is the vial shaken sufficiently to dissolve the reagent
in the cap?

Pg. 2

Are samples digested for one hour at 100°C?

Pg. 2

After cooling, is 0.2 mL of Reagent B added to samples?

Pg. 2

After addition of Reagent B, is a DosiCap C attached and the sample shaken to
dissolve the reagent in the cap?

Pg. 2

Are samples allow to stand for 10 minutes and then shaken and read in the
spectrophotometer?

Pg. 2-3

Notes/Comments:

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Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Orthophosphate:					
Are samples not preserved with acid, stored at 4°C, and analyzed within 48 hours of collection?	Pg. 5				
Is 0.5 mL of sample pipetted into the vial?	Pg. 3				
Is 0.2 mL of Reagent B added to samples?	Pg. 3				
After addition of Reagent B, is a DosiCap C attached and the sample shaken to dissolve the reagent in the cap?	Pg. 3				
Are samples allow to stand for 10 minutes and then shaken and read in the spectrophotometer?	Pg. 2-3				
Notes/Comments:					